Appendix A1.

December 19, 1995

Marine Protected Area Questionnaire

(including cover sheet memo) developed by the Washington MPA Work Group and distributed in the winter of 1995/96 to contacts at three state agencies and one federal agency.

STATE OF WASHINGTON DEPARTMENT OF FISH AND WILDLIFE MARINE RESOURCES DIVISION

FROM:	
SUBJECT:	MARINE PROTECTED AREAS QUESTIONNAIRE
	copies of the questionnaire concerning marine protected areas in Washington at one copy for each marine protected area and return the questionnaires to me 2, 1996.
The definition	on the committee has chosen for marine protected areas includes the following
The s	rea under protection is <u>subtidal or intertidal</u> (up to extreme high water)
	rea is marine:
The a	This includes Puget Sound but <u>not</u> river areas above the saltwater wedge an activities are restricted for protection of natural or historic resources estriction may be found in:
The a Huma The r	This includes Puget Sound but <u>not</u> river areas above the saltwater wedge an activities are restricted for protection of natural or historic resources

Marine Protected Areas in Puget Sound Volume 2: MPA Site Profiles and Appendices

Enclosures

Comments on the process and the survey are welcome. If you have questions, please call

(360 902-2834). I appreciate everyone's assistance in this survey.

Use on	600 Capitol Way North, Olymp he copy of this form for each l	Marine Protected Area (MPA) your orga e responses that relate to multiple	nization
<u>Enclos</u>	se a map, please, showing the	location and boundaries of each MPA	. areas.
	erson completing form:		
		Phone	
2. Nam	e of the MPA:		
		he MPA:	
		er designated the area an MPA? Yes	_ No
	Contact (if different from		
		Phone	
	A Location:		
	5a. County		
		er body, etc)	
	Longitude		
		, Township, Range	
	e of MPA:		
		6b. Acres below MHHW	
	6c. Linear feet of beach:		
		een MHHW and MLLW	
7. Est	•	e attach copies of pertinent documen	ts):
	7a. Was this MPA established	·	
		Restrictions on activities Bo	
		7c. WAC #:	
	7e. Date MPA was established:		
	pose for which the MPA was e		
	8d. Species protection Co	mments	

Appendix A1, continued.

	9a. Is the MPA operated by the organization that owns it? Yes No
	9b. If <u>NO</u> , who operates the MPA
	9c. Is there a management plan for the MPA? Yes No
	PLEASE ENCLOSE A COPY OF THE MANAGEMENT PLAN.
	9d. Is there an on-site manager? Yes No
	NamePhone
10.	Was any modification of habitat or manipulation of resources performed to
make	the MPA perform its intended function? Check: Yes No
	Habitat modified (If yes was checked above, please check all that apply):
	10a. Vegetation removed or added? Yes No
	Type?
	10b. Animal Population changed? Yes No
	How?
	10c. Physical characteristics of the site altered? Yes No
	How?
11.	What kind of human activities are restricted within the site:
	lla. Fishing Describe restrictions
	11b. Hunting Describe restrictions
	11c. Collecting artifacts Describe restrictions
	<pre>11d. How are these restrictions enforced? (Check all that apply)</pre>
	(1) WACs or RCWs enforced by commissioned officers
	(2) Administrative actions against violators
	(3) Provisions in the title to the land
	(4) No trespassing on the site
	(5) Signage on the site
	(6) Other (Please Describe):
	11e. Is enforcement adequate (how do you know)?
12.	How well has the MPA performed its intended purpose? What is the basis for
	evaluation?

Appendix A2.

MPA Site Questionnaire

developed in the fall of 1996, and distributed to approximately 8 willing participants

Marine Protected Area Site Questionnaire for the Inland Sea Region of Washington State

Thank you for helping to identify and profile the protected areas of Washington's inland sea region. The information you provide will be compiled into a background report on MPAs of the region. Please mail or fax your completed questionnaire to the following contact:

Mike Murray	Tel: (206) 526-4293
407 W. Galer Street	Fax: (206) 526-4294
Seattle, WA 98119	E-mail: mmurray@igc.apc.org

Thank you for your assistance!

1.	About You		
	Name:	3.	Location of the Site* *If unsure of details, please note alternate person or
B.	Agency/Organization:		documentation to refer to.
		A.	County:
C.	Address:	B.	Location/Vicinity description:
D.	Phone:		
E.	Fax:		·
F.	E-mail:	C.	Latitude:D. Longitude:
		E.	Quarter:F. Lot(s):
		G.	Section(s)
2.	Basic Site Information	Н.	Township(s):I. Range:
A.	Name of the site:	J.	MPA adjacent or overlapping with other protected areas? (yes / no) Name of
B.	Type of designation:		other sites:
C.	Date of designation or establishment:		
		K.	Do you have a map of the site? (yes / no
D.	Agency/Organization(s) that established)	
	the MPA:	L.	Could you send a detailed map? (yes /
E.	Agency/Organization(s) that manage the MPA:	no)

Appendix A2, continued

4.	Boundaries and Size of the Site*	F.	Subtida	l Acres (below MI	LLW):	
	*If unsure of details, please note alternate person or documentation to refer to.			eet of Beach/Sho ertidal boundary o		
A.	Is there GIS mapping data available for this site? (yes / no)		☐ Extre	ible) is the line of: eme High Tide		
B.	GIS contact name/phone:		□ Mea□ Ordi	an Higher High Wate an High Water nary High Water	er	
C.	Total Acres:			t Meander Line nary Low Water		
D.	Upland Acres (above MHHW):			an Low Tide an Lower Low Wate	r.	
Ε.	Intertidal Acres:		☐ Extre	eme Low Tide er:		_
5.	MPA Purpose and Objectives					
A.	General objectives/area of emphasis: In the spaces next to each applicable mar following:	nagen	nent obje	ective, please eni	ter one of the	
	 for primary objectives for secondary objectives for potentially applicable objectives for non-applicable objectives 		lpland/ errestrial	AREA OF FOCU <u>Intertidal</u>	u s <u>Marine</u>	
	Scientific research					
	Wilderness protection					
	Preservation of species and genetic diversity					
	Maintenance of environmental services					
	Protection of specific natural/cultural features					
	Recreation/tourism		_ 			
	Education		_			
	Sustainable use of natural resources		_ 			
	Maintenance of cultural/traditional attributes		_ 			
	Other Please describe:	•			_	
,	Local building (Author)					
6.	Legal Jurisdiction/Authority			#s		
A.	What are the applicable laws for the MPA?			cy policy # (if applic		
	RCW #s			al laws		
			Local	ordinance		

Appendix A2, continued

1.	Mai	nagement			
Α.	. Is there a management plan for the MPA?				
	(ye	es / no / pending)			
	If ye	es, could you please enclose a copy	? (thanks!).		
В.		ase check and describe the human tain to marine resource/ecosystem p	activity restrictions and enforcement approaches that protection at the site:		
		Public access restrictions	Method(s) of enforcement:		
		Please describe restriction:			
	□	Recreational fishing	Method(s) of enforcement:		
		Please describe restriction:			
	□	Commercial fishing Me	thod(s) of enforcement:		
		Please describe restriction Describe	:		
		Recreational shellfishing	Method(s) of enforcement:		
		Please describe restriction:			
	□	Commercial shellfishing Me	thod(s) of enforcement:		
		Please describe restriction:			
	□	Hunting	Method(s) of enforcement:		
		Please describe restriction:			
		Collection of biota Me	thod(s) of enforcement:		
		Other restrictions: Me	thod(s) of enforcement:		
	-				

Appendix A2, continued

C. What is the status of on-site management/supervision? Please complete the following table of information:

Affiliation, Title, and Number of On-Site	Frequency of Visit/Season	Primary
Staff		Duties
<u>Sample entry</u> : State Parks boat-based Ranger (1)	Weekly in summer; Bi-monthly all other times	Maintenance of facilities, Enforcement public education/interaction
Sample entry: Student Volunteer(2-3)	Weekly in summer	Public education/outreach Maintenance

8. Performance of the MPA

A. Success Factors. Please indicate the importance and status of the following factors for meeting MPA objectives:

•	Critical to success (Y/N)	Status (S =sufficient I =Insufficient)) Comments
Size of MPA			
Buffer Areas			
Zoning within the MPA	·· <u> </u>		
On site boundary demarcat	ion _		
Monitoring			
Research			
Public involvement and			
education/interpretatio	n		
Coordination among			
government agencies	···· <u>—</u>		
Enforcement			

Appendix A2, continued.

Α.	Success Factors, continued	Critical to success (Y/N)	Status (S =sufficient I =Insufficient)	Comments	
	Control of resource threats				
	within boundaries				
	Control of resource threats				
	outside boundaries				
	Resources - staffing				
	Resources - financial				
	Other (please describe belo	ow)			<u></u>
В.	Site characterization and st	udy (marine	and/or intertid	al environment):	
			·	undertaken to determine the effectiveness on nentation/literature:	
	(2) Are monitoring program	ns in place a	and active? (Y	7/N)	
	(3) Are there active research	ch programs	s at the site? (Y/N)	
				cterize marine resources? (Y/N) If yes, pleas	se
	(5) Have marine resource t	hreats been	identified and	characterized? (Y/N)	
	Please list primary threats/is	sues identifie	ed:		
					_
	(6) Are there problems with	ı conflicting	uses at the site	e? (Y/N) Please describe:	
					<u> </u>

Appendix A2, continued.

C.	Management objectives:
	(1) Are current management objectives clearly stated? (Y/N)
	(2) Are management objectives consistent with protection/conservation of marine resources? (Y / N)
	(3) Do management objectives support identifiable and measurable outcomes? (Y/N)
	(4) How closely are the management plan/objectives carried out at the site? (closely / somewhat / remotely / not at all)
D.	Legal protection and designation:
	(1) Is the strength of legal protection sufficient to support objectives? (Y/N)
	(2) Is the specificity of legal protection sufficient to support objectives? (Y / N)
	(3) How secure is the MPA designation? secure (designation not readily changed/removed) variable/potentially secure not secure unsure or unknown
Ε.	Partnerships and Coordination:
	(1) Please indicate and describe the partnership/coordination role of other agencies or groups:
	☐ State agency(s) Agency/program name:
	Role of agency:
	Federal agency(s) Agency/program name:
	Role of agency:
	Tribal governments Tribe name:
	Role of tribe:
	Non-Governmental organizations Organization name:
	Role of organization:
	Local government Department/program name:
	Role of local:
	Private landowners Role of landowner:
	Others? Describe other partners
	Role of other:
	(2) Is there a commitment to public participation in the operation/management of the site? (Y / N)

Appendix A2, continued.

9.	Follow Up
A.	Would you or another contact be available to field additional questions concerning this MPA? (Y/N) Additional or alternate follow-up contact:
В.	Would you like to receive a copy of the MPA background report? (Y/N)
10.	Additional Comments
Ple	ase include any additional comments regarding the description or management of the MPA:

THANK YOU for your assistance with this study!

Appendix B. Matrix of Marine Protected Areas in Puget Sound

This table lists the existing, potential/possible and proposed MPAs identified in this study.

A marine protected area (MPA) refers to: Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment (IUCN 1988).

#	M A P 2a #	Site Name or Location	Designation Type	Primary Manag- ing Agency or Or.	# S I T E	Year of Est.	Predom- inant Compo- nent	Sub- tidal Y/N	Sub- tidal Acres	Inter- tidal Y/N	Inter- tidal Acres	Up- land Y/N	Upland Acres	Total Acres	Primary Purpose/ Objectives	Fishing Restrictions/Marine Resource Protections (or comment)
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Category¹: RESEARCH AND EDUCATIONAL MARINE PRESERVES

The Research and Educational Marine Preserve category represents sites that have been established with an express purpose of providing opportunity for the study of marine resources in relatively undisturbed settings. Such preserves can provide valuable baseline data for present and future comparisons of protected and unprotected sites. Depending upon the specific resource or ecosystem in need of protection to support research or educational activities, these preserves may or may not be associated with restrictions on harvesting of marine life.

1	1	Friday Harbor to Point Caution to 500 yards offshore	San Juan Islands Marine Preserve Area	UW FHL; WDFW	1	1990	subtidal & intertidal	~	Y		Z	0	Research preserve; preservation of species/biodiversity.	No take of shellfish, bottomfish or food fish, except herring; and except salmon for commercial purposes.
2	2	Yellow and Low Islands to 300 yards offshore	San Juan Islands Marine Preserve Area	UW FHL; WDFW	2	1990	subtidal & intertidal	Υ	Υ	0.6 ^a	N	0	Research preserve; preservation of species/biodiversity.	No take of shellfish, bottomfish or food fish, except herring; and except salmon for commercial purposes.
3	3	False Bay to 500 yards offshore	San Juan Islands Marine Preserve Area	UW FHL; WDFW	1	1990	intertidal & subtidal	~	Υ	231 ^a	Z	0	Research preserve; preservation of species/biodiversity.	No take of shellfish, bottomfish or food fish, except herring; and except salmon for commercial purposes.
4	4	Argyle Lagoon	San Juan Islands Marine Preserve Area	UW FHL; WDFW	1	1990	subtidal & intertidal	Υ	Y	3.4 ^a	N	0	Research preserve; preservation of species/biodiversity.	No take of shellfish, bottomfish or food fish, except herring; and except salmon for commercial purposes.

App	end	ix B, continu	ed													
#	M A P 2a #	Site Name or Location	Designation Type	Primary Manag- ing Agency or Org.	# S I T E	Year of Est.	Predom- inant Compo -nent	Sub- tidal Y/N	Sub- tidal Acres	Inter- tidal Y/N	Inter- tidal Acres	Up- land Y/N	Upland Acres	Total Acres	Primary Purpose/ Objectives	Fishing Restrictions/Marine Resource Protections (or comment)
5	5	SW Shaw Island to 500 yards offshore	San Juan Islands Marine Preserve Area	UW FHL; WDFW	1	1990	subtidal & intertidal	Υ		Y		N	0		Research preserve; preservation of species/biodiversity.	No take of shellfish except crab in Parks Bay. No take of bottomfish or food fish, except herring; and except salmon for commercial purposes.
6		San Juan County & Cypress Island (all salt-waters, beds & shorelines).	Marine Biological Preserve	UW FHL	1	1923	subtidal & intertidal	Υ		Y		N	0		Scientific research preserve.	No take of marine biological materials, except for food, kelp, or with permit from the Director of UW Friday Harbor Labs.
7	7	Padilla Bay	National Estuarine Research Reserve	WA Dept. of Ecology	1	1980	intertidal and subtidal	Y	2,000 +/-	Y	8,000	Y	200 +/-	11,000	Research reserve; monitoring; public education and outreach.	Public access restricted and discouraged in sensitive marsh areas.

Category: RECREATIONAL MARINE PRESERVES

The Recreational Marine Preserve category characterizes sites that are set aside primarily for the non-consumptive use of marine resources in a park-like setting (de Macedo 1995). These sites may often be chosen for their aesthetic or recreational values rather than ecological importance. While many Puget Sound MPAs identified in this study accommodate recreational activities, only two are recognized as being designated with a primary purpose of non-consumptive recreational activities, specifically, scuba diving.

¹ The MPA categories referenced here do *not* represent official designation types or titles. These categories have been created for use in this study. Section 3.1.2 discusses the development and use of this categorization scheme.

8	8	Edmonds Underwater Park / Brackett's Landing	Underwater Park	City of Edmonds	1	1970	subtidal & intertidal	Y	16.8 ^a	Y	8.2 ^a	Y	2	27	Recreational diving site; preservation of species.	City of Edmonds prohibits take of <i>any</i> marine life. In part of the park, WDFW prohibits take of foodfish or shellfish (WAC 220-56-130; 220-20-025). (As of late 1997, a proposal was under consideration to expand the WDFW closed area to match City park boundaries).
9	9	Sund Rock	Marine Preserve Area	WDFW	1	1994	subtidal	Υ		Y		N	0		Recreational diving site; preservation of species.	No take of shellfish, except shrimp; no take of food fish, except salmon and trout.
Ap	pendi	ix B, continu	ed													
#	M A P 2a #	Site Name or Location	Designation Type	Primary Manag- ing Agency or Org.	# S I T E	Year of Est.	Predom- inant Compo -nent	Sub- tidal Y/N	Sub- tidal Acres	Inter- tidal Y/N	Inter- tidal Acres	Up- land Y/N	Upland Acres	Total Acres	Primary Purpose/ Objectives	Fishing Restrictions/Marine Resource Protections (or comment)
The Gro mai	Marin up 199 ntain g	e Species Prese 96). As harvest genetic diversit	refugia for spec	assigned cific specie vning stocl	es, M k bio	arine S mass; s	pecies Pres implify mar	erves nagen	can con nent and	serve s	stocks thi cement	reater appro	ned by ov aches; pi	rerexploit rovide a	fishery management goals ation or destructive fishing p baseline to monitor the con 1994b).	practices; help to
10		Haro Strait	Special Managemen t Fishery Area	WDFW	1	Be- tween 1979 & 1987	subtidal	Y		Y		N	0		Harvest refugia / recruitment areas for sea urchin and sea cucumber; baseline population monitoring and research.	No commercial harvest of sea urchins or sea cucumbers.
11		San Juan & Upright Channel	Special Managemen t Fishery Area	WDFW	1	1972	subtidal	Υ		Υ		N	0		Harvest refugia / recruitment areas for sea urchin and sea cucumber; baseline population monitoring and research.	No commercial harvest of sea urchins or sea cucumbers.

12	12	Point Lawrence	Voluntary No-Take Bottom Fish Recovery Area	San Juan County	1	1997	subtidal	Y	Y	N	0	136.4	Voluntary harvest refugia for bottom fish to replenish depleted stocks.	No legal protections; voluntary compliance only with requested no- take of bottom fish.
13	13	Bell Island	Voluntary No-Take Bottom Fish Recovery Area	San Juan County	1	1997	subtidal	Υ	Y	N	0	27.3	Voluntary harvest refugia for bottom fish to replenish depleted stocks.	No legal protections; voluntary compliance only with requested no- take of bottom fish.
14	14	Charles Island	Voluntary No-Take Bottom Fish Recovery Area	San Juan County	1	1997	subtidal	Υ	Y	N	0	54.5	Voluntary harvest refugia for bottom fish to replenish depleted stocks.	No legal protections; voluntary compliance only with requested no- take of bottom fish.
15	15	Pile Point	Voluntary No-Take Bottom Fish Recovery Area	San Juan County	1	1997	subtidal	Υ	Υ	N	0	54.5	Voluntary harvest refugia for bottom fish to replenish depleted stocks.	No legal protections; voluntary compliance only with requested no- take of bottom fish.
16	16	Deadman Bay	Voluntary No-Take Bottom Fish Recovery Area	San Juan County	1	1997	subtidal	Y	Y	N	0	54.5	Voluntary harvest refugia for bottom fish to replenish depleted stocks.	No legal protections; voluntary compliance only with requested no- take of bottom fish.

Ap	end	ix B, continu	ed													
#	M A P 2a #	Site Name or Location	Designation Type	Primary Manag- ing Agency or Org.	# S I T E S	Year of Est.	Predom- inant Compo -nent	Sub- tidal Y/N	Sub- tidal Acres	Inter- tidal Y/N	Inter- tidal Acres	Up- land Y/N	Upland Acres	Total Acres	Primary Purpose/ Objectives	Fishing Restrictions/Marine Resource Protections (or comment)
17	17	Kellett Bluff	Voluntary No-Take Bottom Fish Recovery Area	San Juan County	1	1997	subtidal	Υ		Υ		N	0	72.8	Voluntary harvest refugia for bottom fish to replenish depleted stocks.	No legal protections; voluntary compliance only with requested no- take of bottom fish.
18	18	Gull Rock	Voluntary No-Take Bottom Fish Recovery Area	San Juan County	1	1997	subtidal	Υ		Υ		N	0	54.5	Voluntary harvest refugia for bottom fish to replenish depleted stocks.	No legal protections; voluntary compliance only with requested no- take of bottom fish.
19	19	Bare Island	Voluntary No-Take Bottom Fish Recovery Area	San Juan County	1	1997	subtidal	Υ		Υ		N	0	72.8	Voluntary harvest refugia for bottom fish to replenish depleted stocks.	No legal protections; voluntary compliance only with requested no- take of bottom fish.

Category: MARINE HABITAT/NATURE PRESERVES

The Marine Habitat/Nature Preserve category represents those sites that exist primarily to preserve assemblages of flora and fauna within an ecosystem. They are often established to protect outstanding ecosystems and natural features, endangered species, areas of scientific importance or areas representative of particular natural areas (de Macedo 1995; Salm and Clark 1984, 236). They often contain fragile ecosystems or life forms and represent areas of important biological or geological diversity (Salm and Clark 1984). In this study, the sites categorized as Marine Habitat/Nature Preserves have in common a protection of habitat areas rather than a single species focus. Most contain upland and intertidal area, with only a few containing a subtidal components. Most sites facilitate little or no public access, and discourage consumptive activities in their intertidal zones (through legal or proprietary based controls).

20	20	Dabob Bay	Natural Area Preserve	DNR	1	1987	intertidal	N	0	Υ		Y		187	Ecosystem/biodiversity protection; limited scientific & educational use.	No public access (except approved research projects and educational activities).
21		Kennedy Creek	Natural Area Preserve	DNR	1	1990 apprx	upland	Ν	0	Υ		Υ		239	Ecosystem/biodiversity protection; limited scientific & educational use.	No public access (except approved research projects and educational activities).
22	22	Skookum Inlet	Natural Area Preserve	DNR	1	1986	intertidal	N	0	Υ	53	Y	21	74	Ecosystem/biodiversity protection; limited scientific & educational use.	No public access (except approved research projects and educational activities).

Арј	oendi	ix B, continu	e d													
#	M A P 2a #	Site Name or Location	Designation Type	Primary Manag- ing Agency or Org.	# S I T E S	Year of Est.	Predom- inant Compo -nent	Sub- tidal Y/N	Sub- tidal Acres	Inter- tidal Y/N	Inter- tidal Acres	Up- land Y/N	Upland Acres	Total Acres	Primary Purpose/ Objectives	Fishing Restrictions/Marine Resource Protections (or comment)
23	See MAP 2b	San Juan Islands (83 rocks, reefs and islands)	National Wildlife Refuge	USFWS	83	1914 thru 1976	upland	N	0	Y b		Υ		449	Migratory bird and marine mammal protection; wilderness preservation; wildlife habitat preservation.	No public access to all but two sites; 200 yard no access marine buffer encouraged.
24	24	Protection Island	National Wildlife Refuge	WDFW & USFWS	1	1988	upland, intertidal, subtidal	Ϋ́C		Υ ^C		Y	316	659	Migratory bird and marine mammal protection; wildlife habitat preservation.	In marine buffer area ^c of 200 yds. and on uplands, no public access.
25	25	Zella M. Schultz / Protection Island	Seabird Sanctuary	USFWS	1	1975	upland, intertidal, subtidal	Y		Y		Y	48		Preservation of seabird habitat; protection of seabirds and marine mammals.	Per cooperative management agreement with USFWS, no public access to Sanctuary and within 200 yard marine buffer area.
26	26	Tongue Point	Marine Life Sanctuary	Clallam County Parks	1	1989	intertidal and subtidal	Y		Υ		N	0		Ecosystem protection for intertidal marine life observation area.	County ordinance: no removal of marine biota from intertidal area (sport fishing OK).
27	27	Yellow Island	Nature Conservancy Preserve	TNC	1	1980	upland	N	0	Yd		~		10	Ecosystem preservation; scientific study; education and observation. Primary focus on upland grasslands.	TNC Preserve rules: no collection of animals or plants; no fishing (while on Preserve property); limited public access.
28	28	Chuckanut Island / Cyrus Gates Memorial Preserve	Nature Conservancy Preserve	TNC	1	1972	upland	N	0	Y		Y		5.2	Ecosystem preservation; scientific study; education and observation.	TNC Preserve rules: no collection of animals or plants; no fishing (while on Preserve property); limited public access.
29	29	Foulweather Bluff	Nature Conservancy Preserve	TNC	1	1966	upland & intertidal	N	0	Υ		Y		101.47	Ecosystem preservation; scientific study; education and observation. Wetland and forest emphasis.	TNC Preserve rules: no collection of marine animals or plants; no fishing (while on Preserve property); limited public access.

Арј	pend	ix B, continu	ed													
#	M A P 2a #	Site Name or Location	Designation Type	Primary Manag- ing Agency or Org.	# S I T E S	Year of Est.	Predom- inant Compo -nent	Sub- tidal Y/N	Sub- tidal Acres	Inter- tidal Y/N	Inter- tidal Acres	Up- land Y/N	Upland Acres	Total Acres	Primary Purpose/ Objectives	Fishing Restrictions/Marine Resource Protections (or comment)
30	30	Goose Island	Nature Conservancy Preserve	TNC	1	1975	upland	N	0	γ ^d		Υ		2.72	Ecosystem preservation; scientific study and education. Marine bird breeding habitat focus.	TNC Preserve rules: no public access.
31	31	Deadman Island	Nature Conservancy Preserve	TNC	1	1975	upland	N	0	Υ		Y		1.98	Ecosystem preservation; scientific study and education. Marine bird breeding habitat focus.	TNC Preserve rules: no public access.
32	32	Sentinel Island	Nature Conservancy Preserve	TNC	1	1979	upland	Z	0	Y ^d		Y		15	Ecosystem preservation; scientific study and education. Marine bird and intertidal habitat protection.	TNC Preserve rules: no public access.
33	33	Waldron Island	Nature Conservancy Preserve	TNC	1	1968	upland	N	0	Υď		Y		271.78	Ecosystem preservation; scientific study; education and observation. Woodland and bird habitat focus.	TNC Preserve rules: no collection of animals or plants; no fishing (while on Preserve property); limited public access to site.
34	34	Lummi Island	Natural Area Preserve	WDFW	1	199?	upland	N	0	Y		Υ		800	Habitat protection for 5 priority species, including endangered peregrine falcon.	(While NAPs generally prohibit or discourage public access, this approach is not yet enforced at this site).
35	35	Kimball Preserve, Decatur Island	San Juan Preservation Trust Preserve	SJPT	1	1985	upland	N	0	Y		Y	64		Preservation of the biologic, scenic, and historic heritage of the San Juan Islands; habitat protection for native floral and faunal communi-ties.	No public access to site, including intertidal area (along 330 feet of shoreline owned by SJPT).
36	36	South Puget Sound (at McNeil, Gertrude and Pitt Islands)	Wildlife Area	WDFW	1	1988	upland	N	0	Y		Υ		4,575	Provide non-consumptive recreational and educational use opportunities.	Public access to and consumptive uses prohibited on tidelands of McNeil, Pitt and Gertrude Islands.

Ap	pendi	ix B, continu	ed													
#	M A P 2a #	Site Name or Location	Designation Type	Primary Manag- ing Agency or Org.	# S I T E S	Year of Est.	Predom- inant Compo -nent	Sub- tidal Y/N	Sub- tidal Acres	Inter- tidal Y/N	Inter- tidal Acres	Up- land Y/N	Upland Acres	Total Acres	Primary Purpose/ Objectives	Fishing Restrictions/Marine Resource Protections (or comment)

Category: MULTIPLE USE PROTECTED AREAS

The establishment of "multiple use" protected areas in the marine environment is a common approach to marine conservation. Multiple use MPAs are often noted as serving multiple objectives, and may facilitate combinations of activities such as research, education, recreation, and consumptive and non-consumptive uses while striving to protect special habitats or resources. Larger multiple use MPAs may be zoned to separate conflicting uses and minimize sensitive area or resource impacts. For this study, the category of Multiple Use Protected Area has been assigned primarily to sites that have set aside area for habitat or species protection, while still facilitating compatible human uses, including the harvest of marine resources. One exception, the Titlow Beach Marine Preserve, prohibits harvest of almost all marine species but is categorized as a multiple use protected area because of its noted dual objectives of supporting research and education as well as providing a recreational dive site.

37	37	Titlow Beach	Marine Park / Marine Preserve Area	METRO Tacoma	1	1994	subtidal & intertidal	Y		Y	13.4 ^a	Y	0	55.6	Research, monitoring and educational preserve; recreational diving site; preservation of species.	No take of shellfish or food fish, except salmon fishing with artificial lure from shore or non-motorized boat. City of Tacoma METRO prohibits seaweed collection.
38	38	Cypress Island	Natural Resources Conservatio n Area	DNR	1	1987	upland	N	0	Y		Y		3,587	Ecosystem protection; protection of habitat for endangered, threatened and sensitive species; low impact public use; research & education	No specific marine resource protection restrictions. (Pending phase 2 management planning considering increased subtidal resource protections).
39	39	Woodard Bay	Natural Resources Conservatio n Area	DNR	1	1987	upland	N	0	Υ		Y		650	Ecosystem protection; protection of habitat for endangered, threatened and sensitive species; low impact public use; research & education.	No access in sensitive intertidal areas; access discouraged at sensitive adjacent subtidal areas.
40	40	Dungeness	National Wildlife Refuge	USFWS	1	1915	upland	N	0	Y		Y		631	Serve as a refuge, preserve and breeding ground for native birds; migratory bird protection; conservation of endangered species; low impact recreation use.	No access to harbor seal area; no windsurfing or jet skis; other off-limit and seasonally closed zones.

Ap	pendi	ix B, continu	ed													
#	M A P 2a #	Site Name or Location	Designation Type	Primary Manag- ing Agency or Org.	# S I T E S	Year of Est.	Predom- inant Compo -nent	Sub- tidal Y/N	Sub- tidal Acres	Inter- tidal Y/N	Inter- tidal Acres	Up- land Y/N	Upland Acres	Total Acres	Primary Purpose/ Objectives	Fishing Restrictions/Marine Resource Protections (or comment)
41	41	Nisqually	National Wildlife Refuge	USFWS	1	1974	upland & intertidal	N	0	Y		Y		2,973	Migratory bird protection; wildlife habitat preservation.	(No restrictions on fishing in intertidal/ subtidal areas). Trails keep visitors out of sensitive marsh areas; some access restrictions to river bank fishing areas.
42	42	Skagit	Wildlife Area	WDFW	1	1948 thru 1992	intertidal	N	0	Y		Y		13,000	Preservation, protection and perpetuation of wildlife; habitat preservation, including migratory bird habitat; maximization of compatible wildlife- associated recreational use.	(None at this time. Pending management plan, if approved, may lead to prohibition of commercial clamming).
43- 102	S1- S60	State Park Areas (developed Parks only)	State Parks & Marine State Parks	WSP&R C	60	1915 thru 1995+	upland and intertidal	Y		Y		Υ		20,429	Public recreation; natural features and resource protection and conservation.	No harvest of non- game invertebrates; no algae harvest except at Fort Ebey, Fort Flagler & Fort Worden State Parks.
102	TOTA	L MPAs			185	TOTAL	Sites									

Apı	pendi	ix B, continu	ed													
#		Site Name or Location	Designation Type	Primary Manag- ing Agency or Org.	# S I T E S	Year of Est.	Predom- inant Compo -nent	Sub- tidal Y/N	Sub- tidal Acres	Inter- tidal Y/N	Inter- tidal Acres	Up- land Y/N	Upland Acres	Total Acres	Primary Purpose/ Objectives	Fishing Restrictions/Marine Resource Protections (or comment)
Cate	egory:	POTENTIAL/PO	OSSIBLE MPAs													
the and	site's n close	narine area boi	undaries and/c of these sites, b	or manage eyond the	emen e sco	t; or (2) pe of th) uncertaint nis prelimina	ty as to ary ass	o whethe sessment	er or ho , would	ow the sit d be ned	te fund	ctions to p	protect th	s questionable due to: (1) la ne marine environment or re h areas and definitively incl	sources. Further study
103		Undevelope d State Park Areas	State Parks or Marine State Parks	WSP&R C	37 +/-		upland & intertidal	Y		Y		Y			Potential Multiple Use MPAs.	Marine harvest regulations already in place for State Parks would be applicable (no harvest of nongame invertebrates; no algae harvest — see # 37 above). Potential for additional marine resource protection dependent upon management planning for individual sites.
104		State Underwater Parks	Underwater Recreation Areas and Underwater Natural Areas	WSP&R C	9	1970 thru 1977?	subtidal	Y		?		N	0		Potential Recreational Marine Preserves. Original intended purpose not realized: underwater recreational use with areas closed (U/W Natural Areas) and open (U/W Recreation Areas) to fishing.	
105		Puget Sound Oyster Reserves	Oyster Reserves	WDFW	19	1890 thru 1910	intertidal	N	0	Y	1,003	N	0	1,003	Potential Marine Species Preserves. Olympia oyster and clam production; protection and recovery of Olympia oyster broodstock sources.	Some parcels closed to public harvest for Olympia oyster broodstock production. (Lacking status/confirmation of closure

areas)

Арј	oendi	ix B, continu	ed													
#		Site Name or Location	Designation Type	Primary Manag- ing Agency or Org.	# S I T E S	Year of Est.	Predom- inant Compo -nent	Sub- tidal Y/N	Sub- tidal Acres	Inter- tidal Y/N	Inter- tidal Acres	Up- land Y/N	Upland Acres	Total Acres	Primary Purpose/ Objectives	Fishing Restrictions/Marine Resource Protections (or comment)
106		Commerciall y closed salmon areas and salmon preserves	Special fishery managemen t areas	WDFW	31 +/-		subtidal	Y		?		N	0		Potential Marine Species Preserve additional infor-mation needed. Many of these areas were closed to protect seabirds from fishery operations, or for protection of resident salmon stocks.	Areas closed year- round to commercial harvest of salmon, excepting reef net fishery areas.
107		Commerciall y closed octopus area (near Tacoma narrows)	Special fishery managemen t area	WDFW	1		subtidal	Υ		?		N	0		Potential Marine Species Preserve additional information needed regarding purpose of closure.	No commercial harvest of octopus.
108		Commerciall y closed scallop areas (San Juan Islands)	Special fishery managemen t area	WDFW	4		subtidal	Υ		?		N	0		Potential Marine Species Preserve additional information needed.	No commercial harvest of pink or spiny scallop (trawl or dive).
109		Nisqually	Wildlife Area	WDFW	1			N	0	Y		Y		622	Potential Multiple Use Protected Area. WDFW Wildlife Areas are created for the preservation, pro- tection and perpetuation of wildlife; habitat preser- vation, including migratory bird habitat; maximization of compatible wildlife- associated recreational use (consumptive and non-consumptive). Additional information required.	(Extent of protection provided intertidal area and resources unknown).
110		Additional City or County Parks with intertidal or subtidal area	City or County Park	Local Govt.	?										Potential Multiple Use Protected Areas and/or Marine Recreational Preserves. Additional infor-mation required.	(Policy and implementa-tion concerning marine resource collection/ harvest unknown).

Ap	pendi	ix B, continu	ıed													
#		Site Name or Location	Designation Type	Primary Manag- ing Agency or Org.	# S I T E S	Year of Est.	Predom- inant Compo -nent	Sub- tidal Y/N	Sub- tidal Acres	Inter- tidal Y/N	Inter- tidal Acres	Up- land Y/N	Upland Acres	Total Acres	Primary Purpose/ Objectives	Fishing Restrictions/Marine Resource Protections (or comment)
Cate	egory:	PROPOSED M	PAs	•									l		,	
This	categ	jory was create	ed for MPAs und	der consid	eratio	on for c	lesignation									
111		Northwest Straits	Proposed National Marine Sanctuary	NOAA 1 and Ecology WDFW 1			subtidal	Y		Y		N	0		Potential Multiple Use Protected Area.	(Undetermined).
112		Octopus Hole	Proposed No-Take MPA	WDFW	1		subtidal	Υ		N	0	N	0		Uncertain at this time - likely for non-consumptive recreational scuba diving.	(Proposed in 1997. Under WDFW consideration. Will go through public review/hearing. See Table 4.5 for location description).
113		Orchard Rocks	Proposed No-Take MPA	WDFW	1		subtidal	Υ		N	0	N	0		Uncertain at this time - likely for non-consumptive recreational scuba diving.	(Proposed in 1997. Under WDFW consideration. Will go through public review/hearing. See Table 4.5 for location description).
114		Edmonds Underwater Park — expansion	Proposed	d WDFW 1		subtidal	Y		Y		N	0		To make consistent state regs and city ordinance. This proposal would change the legal description of the closed area at Edmonds Underwater Park to encompass 1800 feet of shoreline instead of the 250 feet now closed.	The existing WDFW laws at the site prohibiting take of foodfish or shellfish (WAC 220-56-130; 220-20-025) would apply to the proposed larger area.	

App	endix B, continu	neq													
#	Site Name or Location	Designation Type	Primary Manag- ing Agency or Org.	# S I T E S	Year of Est.	Predom- inant Compo -nent	Sub- tidal Y/N	Sub- tidal Acres	Inter- tidal Y/N	Inter- tidal Acres	Up- land Y/N	Upland Acres	Total Acres	Primary Purpose/ Objectives	Fishing Restrictions/Marine Resource Protections (or comment)
115	Olympic Beach	Proposed No-Take MPA	WDFW; City of Edmonds	1		intertidal	?		Y		N	0		To make consistent state regs and city ordinance; to protect park-type value; to ensure diversity of flora and fauna; as a human health precaution due to pollution.	(Proposed in 1997. Under WDFW consider- ation. Will go through public review/hearing. See Table 4.5 for location description).
116	Edmonds City Beach	Proposed No-Take MPA	WDFW; City of Edmonds	1		intertidal	?		Y		N	0		To make consistent state regs and city ordinance; to protect park-type value; to ensure diversity of flora and fauna; as a human health precaution due to pollution.	(Beach north of Edmonds Fishing Pier). (Proposed in 1997. Under WDFW consideration. Will go through public review/hearing. See Table 4.5 for location description).
117	City of Des Moines Park	Proposed No-Take MPA	WDFW; City of Des Moines	1		intertidal	?		Y		N	0		To make consistent state regs and city ordinance; to protect park-type value; to ensure diversity of flora and fauna; as a human health precaution due to pollution.	(Proposed in 1997. Under WDFW consideration. Will go through public review/hearing. See Table 4.5 for location description).
118	South 239th Street Park	Proposed No-Take MPA	WDFW; City of Des Moines	1		intertidal	?		Y		N	0		To make consistent state regs and city ordinance; to protect park-type value; to ensure diversity of flora and fauna; as a human health precaution due to pollution.	(Proposed in 1997. Under WDFW consider- ation. Will go through public review/hearing. See Table 4.5 for location description).

Notes:

- a. These intertidal acreage estimates are based on calculations of public tidelands only (private tidelands excluded). These estimates were calculated by WDFW (Butler, personal communication 1997) and are based on information from the National Wetland Inventory database and WDFW data. For some sites, an estimated subtidal acreage component has been calculated by subtracting from total acres (where known) the upland and intertidal acreage estimates.
- b. Although the seaward boundary of the San Juan Islands NWR is thought to be the line of mean high tide, some intertidal acreage is effectively included. For example, there are 9 acres of reefs included in the Refuge which are said to be awash at high tide.
- c. The approximately 343 intertidal and subtidal acres associated with the Protection Island National Wildlife Refuge are public aquatic lands. The bedlands have been withdrawn by DNR from leasable status with the intent of providing a marine buffer for the resources of the Protection Island National Wildlife Refuge and the Zella M. Schultz Seabird Sanctuary, while the public tidelands have been leased to the USFWS.
- d. The intertidal area associated with these Nature Conservancy (TNC) Preserves is not owned by TNC, but DNR has withdrawn these aquatic lands from conflicting uses.

Key to Abbreviations:

DNR - Washington Department of Natural Resources Ecology - Washington Department of Ecology METRO Tacoma - Metropolitan Park District of Tacoma NAP - Natural Areas Preserve

NRCA - Natural Resources Conservation Area WSP&RC - Washington State Parks & Recreation Commission
UW FHL - University of WA Friday Harbor Laboratories TNC - The Nature Conservancy of Washington

WDFW - Washington Department of Fish & Wildlife

USFWS - Untied States Fish & Wildlife Service

SJPT - San Juan Preservation Trust

Appendix C1. Game Fish

As Classified by the Washington Department of Fish and Wildlife and Listed in RCW 77.08.020 and WAC 232-12-019

Rock bass (Ambloplites rupestris)

Longnose Sucker (Catostomus catostomus)

Bridgelip Sucker (Catostomus columbianus)

Largescale Sucker (Catostomus macrocheilus)

Mountain Sucker (*Catostomus platyrhynchus*) Lake white fish (*Coregonus clupeaformis*)

Grass Carp (Ctenopharyngodon idella)

Northern Pike (Esox lucius)

(and hybrids involving genus Esox)

Tiger Muskellunge (Esox masquinongy immaculatus)

Blue catfish (Ictalurus furcatus)

Black bullhead (Ictalurus melas)

Yellow bullhead (Ictalurus natalis)

Brown bullhead (Ictalurus nebulosus)

Channel catfish (Ictalurus punctatus)

Green sunfish (*Lepomis cyanellus*)

Pumpkinseed (Lepomis gibbosus)

Warmouth (Lepomis gulosus)

Bluegill (*Lepomis macrochirus*)

Burbot or fresh water ling (*Lota lota*)

Peamouth Chub (Meilocheilus caurinus)

Smallmouth bass (*Micropterus dolomieui*)

Largemouth bass (*Micropterus salmoides*) Golden trout (*Oncorhynchus aquabonita*) Cutthroat trout (Oncorhynchus clarkii)

Coho salmon (Oncorhynchus kisutch)

(in its landlocked form)

Rainbow or steelhead trout (Oncorhynchus mykiss)

Kokanee or silver trout (Oncorhynchus nerka)

(in its landlocked form)

Chinook salmon (Oncorhynchus tshawytscha)

(in its landlocked form)

Yellow perch (Perca flavescens)

White crappie (Pomixis annularis)

Black crappie (*Pomixis nigromaculatus*)

Mountain white fish (Prosopium williamsoni)

Northern Squawfish (Ptychocheilus oregonensis)

Flathead Catfish (*Pylodictus olivaris*)

Atlantic salmon (Salmo salar) (in its landlocked

form)

Brown trout (Salmo trutta)

Bull Trout (Salvelinus confluentus)

Eastern brook trout (Salvelinus fontinalis)

Dolly Varden trout (Salvelinus malma)

Lake trout (Salvelinus namaycush)

Walleye (Stizostedion vitreum)

Arctic grayling (Thymallus articus)

Appendix C2. Foodfish

As Classified by the WDFW and Listed in WAC 220.12.010

Barracuda

Pacific barracuda (Sphyraena argentea)

Cyprinids

Carp (Cyprinus carpio)

Cods and hake

Pacific hake or whiting (*Merluccius productus*)
Walleye pollock (*Theragra chalcogrammus*)
Pacific Tomcod (*Microgadus proximus*)

Pacific Cod or true cod (Gadusmacrocephalus)

Flounder, sole and halibut

Butter sole or Bellingham sole (*Isopsetta isolepis*)

C-O sole (*Pleuronichtys coenosus*)

Dover sole (Microstomus pacificus)

English sole (*Parophrys vetulus*)

Flathead sole (Hippoglossoides elassodon)

Pacific halibut (Hippoglossus stenolepis)

Petrale sole (Eopsetta jordani)

Rex sole (Glyptocephalus zachirus)

Rock sole (Lepidopsetta bilineata)

Pacific sand dab (Citharichthys sordidus)

Sand sole (Psettichthys melanostictus)

Slender sole (*Lyopsetta exilis*)

Speckled sand dab (Citharichthys stigmaeus)

Starry flounder (*Platichthys stellatus*)

Turbot or Arrowtooth flounder (Atheresthes stomias)

All other species of sole and flounder (*Pleuronectiformes*)

Greenling

Lingcod (Ophiodon elongatus)

Rock greenling (Hexagrammos superciliosus)

Kelp greenling (*Hexagrammos decagrammus*)

All other species of greenling (Hexagrammidae)

Herring and herring-like fishes

Northern anchovy (Engraulis mordax)

Pacific sand lance or candlefish (Ammodytes hexapterus)

Pacific herring (Clupea harengus pallasi)

Pacific sardine (Sardinops sagax)

American shad (Alosa sapidissima)

Mackerels, tunas and jacks

Pacific bonito (Sarda chiliensis)

Pacific mackerel (Scomber japonicus)

Jack mackerel (Trachurus symmetricus)

Monterey Spanish mackerel (Scomberomorus concolor)

Spanish mackerel (Scomberomorus maculatus)

Yellowtail (Seriola dorsalis)

Albacore (Thunnus alalunga)

Bluefin tuna (*Thunnus thynnus*)

Skipjack tuna (Euthynnus pelamis)

Yellowfin tuna (*Thunnus albacares*)

All other species of tunas and mackerels (Scombridae)

Pacific pomfret (*Brama japonica*)

Pacific pompano (Peprilus simillimus)

Skates

Longnose skate (*Raja rhina*)

Big skate (Raja binoculata)

All other species of skates (Rajidae)

Rockfish

Bocaccio (Sebastes paucispinis)

Black rockfish (Sebastes melanops)

Brown rockfish (Sebastes auriculatus)

Copper rockfish (Sebastes caurinus)

Greenstriped rockfish (Sebastes elongatus)

Canary rockfish (Sebastes pinniger)

Pacific Ocean perch (Sebastes alutus)

Yelloweye or rasphead rockfish

(Sebastes ruberrimus)

Rosefish or splitnose rockfish (Sebastes diploproa)

Silvergray rockfish (Sebastes brevispinis)

Quillback rockfish (Sebastes maliger)

Yellowtail rockfish (Sebastes flavidus)

All other species of rockfish (Scorpaenidae)

Salmon

Chinook or King salmon

(Oncorhynchus tshawytscha)

(except in its landlocked form)

Chum salmon (*Oncorhynchus keta*)

Pink (Oncorhynchus gorbuscha)

Coho or silver (Oncorhynchus kisutch)

(except in its landlocked form)
Sockeye (*Oncorhynchus nerka*)

Masu (*Oncorhynchus masu*)

Sculpins

Brown Irish lord (Hemilepidotus spinosus)

Buffalo sculpin (Enophrys bison)

Cabezon (Scorpaenichthys marmoratus)

Great sculpin (Myoxocephalus polyacanthocephalus)

Pacific Staghorn sculpin (*Leptocottus armatus*)

Red Irish lord (Hemilepidotus hemilepidotus)

Seabass and drums

White seabass (Cynoscion nobilis)

All other seabass and drums

(Sciaenidae and Serranidae)

Sharks

Sixgill shark (Hexanchus griseus)

Soupfin shark (Galeorhinus zyopterus)

Dogfish or spiny dogfish (Squalus acanthias)

All other species of sharks

(Squaliformes & Hexanchiformes)

Smelts

Eulachon or Columbia River smelt

(Thaleichthys pacificus)

Longfin smelt (Spirinchus dilatus)

Surf smelt (*Hypomesus pretiosus*)

All other species of smelt (Osmeridae)

Appendix C3. Shellfish

As Classified by the Washington Department of Fish and Wildlife and Listed in WAC 220.12.020

Abalone

Red abalone (*Haliotis refescens*)
Pinto abalone (*Haliotis kamtschatkana*)

Mussel

Blue mussel (*Mytilis edulis*) California mussel (*Mytilis californianus*)

Scallops

Pacific pink scallop (*Chlamys rubida*) Rock scallop (*Crassadoma gigantea*) Spiny scallop (*Chlamys hastata*) Weathervane scallop (*Patinopecten caurinus*)

Clams

Bent nose clam (Macoma secta)
All other macoma clams (Macoma spp.)
Butter clam (Saxidomus giganteus)
Common cockle (Clinocardium nuttalli)
Geoduck (Panope abrupta)
Horse or Gaper clam (Tresus nuttalli, Tresus capax)
Mud or soft shell clam (Mya arenaria)
Manila clam (Tapes philippinarum)
Piddock (Zirfaea pilsbryi)
Razor clam (Siliqua patula)
Rock or native little neck clam (Protothaca staminea)

Oysters

All other oysters (Ostreidae)

Eastern oyster (*Crassostrea virginica*)
Olympia or native oyster (*Ostrea lurida*)
Pacific oyster (*Crassostrea gigas*)
Kumamoto oyster (*Crassostrea gigas* [*kumamoto*])
European oyster (*Ostrea edulis*)

All other native clams (Eulamellibranchia)

Squid

Pacific Coast squid (*Loligo opalescens*)
Nail squid (*Onychoteuthis borealijaponica*)
Flying squid (*Ommastrephes bartramai*)
All other squid (*Sepioidea or Teuthoiden*)

Octopus

Octopus (Octopus dolfeni)

Barnacles

Goose barnacle (Pollicipes polymerus)

Shrimp

Coonstripe shrimp (Pandalus danae)
Coonstripe shrimp (Pandalus hypsinotus)
Ghost or sand shrimp (Callianassa spp.)
Humpy shrimp (Pandalus goniurus)
Mud shrimp (Upogebia pugettensis)
Ocean pink shrimp (Pandalus jordani)
Pink shrimp (Pandalus borealis)
Sidestripe shrimp (Pandalopsis dispar)
Spot shrimp (Pandalus platyceros)

Crab

Dungeness or Pacific crab (*Cancer magister*) Red rock crab (*Cancer productus*) Tanner crab (*Chionoecetes tanneri*)

Crawfish

Crawfish (Pacifastacus sp.)

Sea cucumber

Sea cucumber (*Parastichopus californicus*) Sea cucumber (*Cucumaria miniata*)

Sea urchin

Green urchin (*Strongylocentrotus droebachiensis*) Red urchin (*Strongylocentrotus franciscanus*) Purple urchin (*Strongylocentrotus purpuratus*)

Appendix C4. Washington Department of Fish and Wildlife Species Listings, Categories and Terminology

WDFW has statutory authority to classify wildlife species as "protected" (WAC 232-12-011). **Protected species** are not to be hunted or fished (WAC 232-12-011). Protected species include those that have been designated as: endangered, threatened, sensitive and other select wildlife species listed at WAC 232-12-011(3). Endangered, threatened and sensitive species are defined as follows:

- Endangered species are those wildlife species native to the state of Washington that are seriously threatened with extirpation throughout all or a significant portion of their range within the state. Endangered species are legally designated in WAC 232-12-014. Currently, 24 species have been designated by WDFW as endangered (WAC 232-12-014).
- Threatened species are those wildlife species native to the state of Washington that are likely to become an endangered species within the foreseeable future throughout a significant portion of their range within the state without cooperative management or removal of threats. Threatened species are legally designated in WAC 232-12-011, and currently consist of eight species (WAC 232-12-011).
- **Sensitive species** are wildlife species native to the state of Washington that are vulnerable or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. Sensitive species are legally designated in WAC 232-12-011, and currently consist of one species (WAC 232-12-011).

WDFW has also maintains a list of "**candidate**" species that will are reviewed for possible listing as endangered, threatened or sensitive species (WDW 1994). There are currently 62 candidate species (WDFW 1996a).

Finally, WDFW lists as "**monitor**" those native Washington species that are of special interest because of special aspects of their natural history (e.g., they were formerly endangered/threatened, require habitat of limited availability, are indicators of environmental quality, etc.) (Penland 1993). There are currently 158 monitor species (WDFW 1996a).

The above-mentioned five state species categories, along with federally-listed endangered, threatened, proposed and candidate species of the state, are referred to collectively as "**species of special concern**" (WDF 1994).

Appendix C4, Continued.

Functioning as something of an overlay to all of the above-mentioned species categories is the WDFW **Priority Habitats and Species (PHS) Program**. Established in 1989, the purposes of this non-regulatory program are to: define, identify, and map the locations of important wildlife habitats and species using specific criteria; and to develop management recommendations for those habitats and species (Penland 1993).

Under the PHS Program, **priority species** are defined as those species requiring protective measures for their perpetuation due to population status, sensitivity to habitat alteration, and/or recreational, commercial or tribal importance (WDFW 1996a). Priority species include those that are state-listed as endangered, threatened, sensitive, candidate; animal aggregations considered vulnerable; and those species of recreational, commercial or tribal importance that are also vulnerable (WDFW 1996a). There are currently 147 species and 14 species groups listed as priority species (WDFW 1996a). **Priority habitats** are those habitat types or elements with unique or significant value to a diverse assemblage of species (WDFW 1996a). There are currently 19 priority habitat types identified (WDFW 1996a).

	Appendix C5. II	ntertidal and Subtid	lal State P	ark Areas (of Puget So	ound		
No.	Park Name, Property Name or Tideland Location	Primary Type/ Classification ^a or comment	Acres (if known)	Saltwater Shoreline in linear feet	WSP&RC Tideland Frontage Feet ^C	Marine State Park (# of)	Under- water Park Sites	Arti- ficial Reef Sites
CLA	LLAM COUNTY			l l				
	Designated/Developed State Parks an	d Marine State Parks:						
1	Sequim Bay State Park	Recreation Area/Marine	91.54	4909.00	4909.00	yes (1)		
			91.54	4,909.00	4,909.00			
	Undeveloped State Park Areas:	 				Π		
2	Clallam Bay	(tidelands; undeveloped)			4020.00			
3	Dungeness	(tidelands;			1943.00			
		undeveloped)						
4	Eagle Point Property	(undeveloped)	52.90	3000.00	0			
5	Hoko River State Park	(tidelands;	580.30	1520.00	1500.00			
		undeveloped)						
6	Hoyt Property	(undeveloped)	36.75	1520.00	0			
			669.95	6,040.00	7,463.00			
ISL <i>A</i>	AND COUNTY							
	Designated/Developed State Parks an	d Marine State Parks:		1		1		
7	Camano Island State Park	Recreation Area	134.35	6700.00	6700.00			
8	Deception Pass State Park Also administers these satellites: (not elsewhere on this list): Deadman's Island S.P. Deception Island Dugualla Bay State Park Hope Island (North) Little Deadman's Island Northwest Island Skagit Island Strawberry Island		4128.29	77000.00	1500.00	yes (4)	yes	
9	Ebey's Landing		45.75	6120.00	6120.00			
10	Fort Casey State Park		411.46	10810.00	15530.00		yes	yes
11	Fort Ebey State Park	Recreation Area	645.00	8000.00	8000.00			
12	Joseph Whidbey State Park	Recreation Area	112.00	3100.00	3100.00			
13	South Whidbey State Park Also administers these satellites: (not elsewhere on this list): Classic "U" Property	Recreation Area	347.00	4500.00	4500.00			
	Classic o Froporty	<u> </u>	5,823.85	11,6230.00	45,450.00			1
	Undeveloped State Park Areas:		0,020.00	11,0200.00	10,730.00	ı		
14	Keystone Spit	(undeveloped)	279.80	7330.00				
15	Useless Bay	(undeveloped; tidelands)	217.00	7330.00	6355.00			
		ideidilds)	279.80	7,330.00	6,355.00		1	
JEE	FERSON COUNTY		217.00	7,330.00	0,000.00	ı		
J_11	Designated/Developed State Parks an	d Marine State Parks						
16	Dosewallips State Park	Recreation Area	424.50	5500.00	5500.00			
17	Fort Flagler State Park	Nocioalion Alea	783.28	19100.00	19100.00	VOS (1)		yes

App	pendix C5, continued.							
No.	Park Name, Property Name or Tideland Location	Primary Type/ Classification a or comment	Acres (if known)	Saltwater Shoreline b in linear feet	WSP&RC Tideland Frontage Feet ^C	Marine State Park (# of)	Under- water Park Sites	Arti- ficial Reef Sites
18	Fort Worden State Park		433.56	11020.00	11020.00	yes (1)		yes
19	Mystery Bay Marine State Park	Recreation Area/Marine	10.09	685.00	685.00			
20	Old Fort Townsend State Park	Recreation Area/Marine	376.73	3960.00	3960.00			
21	Pleasant Harbor State Park	(tidelands)	0.80	100.00	100.00			
22	Triton Cove State Park	(tidelands)	28.50	592.70	555.00	, , ,		
		, , ,	2,057.46	40,957.70	40,920.00			
	Undeveloped State Park Areas:			,	,	<u>I</u>		
23	H.J. Carroll Property	(undeveloped; tidelands)	2.80	560.00	560.00			
24	Kinney Point	(undeveloped; tidelands)		4200.00	4200.00			
25	Right Smart Cove	(undeveloped; tidelands)		200.00	200.00			
26	Toandos Tidelands	(undeveloped; tidelands)		10455.00	10455.00			
27	Wolfe Property/Shine Tidelands	(undeveloped; tidelands)	134.60	16092.00	16092.00			
		,	137.40	31,507.00	31,507.00			
KIN	G COUNTY				2./2222			
	Designated/Developed State Parks a	nd Marine State Parks:						
28	Dash Point State Park	Recreation Area	397.63	3301.00	3251.00			
29	Saltwater State Park	Recreation Area/Marine	87.84	1445.00	1445.00	yes (1)	yes	yes
			485.47	4,746.00	4,696.00			
KITS	SAP COUNTY					•		
	Designated/Developed State Parks a	nd Marine State Parks:						
30	Blake Island State Park	Marine	475.50	17307.00	17307.00	yes (1)	yes	yes
31	Fay-Bainbridge State Park	Recreation Area/Marine	16.84	1420.00	1420.00		1	
32	Fort Ward State Park	Recreation Area/Marine	137.13	4300.00	4300.00		yes	
33	Harper State Park	Launch Area	3.03	777.00	776.88			
34	Illahee State Park	Recreation Area/Marine	74.54	1785.00	1784.70	yes (1)		
35	Kitsap Memorial State Park	Recreation Area/Marine	57.63	1797.00	1797.00	yes (1)		
36	Manchester State Park	Recreation Area	111.17	3400.00	3400.00			
37	Old Man House State Park	Heritage Area	1.00	210.00	210.00			
38	Scenic Beach State Park	Recreation Area	88.24	1487.00	1486.70			
			965.08	32,483.00	32,482.28			
MAS	SON COUNTY							
	Designated/Developed State Parks a					I		
39	Belfair State Park	Recreation Area	62.46	3720.00	3780.00			
	Also administers these satellites:							
	(not elsewhere on this list):							
'		i l						
10	Harvey Rendsland S.P.		045.05	4/00 0-	04000-			
40	Harstine Island State Park		315.00	1600.00	3100.00	(4)		
41	Harstine Island State Park Hope Island (South) Marine S.P.	Marine	106.11	8541.00	8540.81			
	Harstine Island State Park	Marine Recreation Area/Marine Recreation Area/Marine				yes (1)		

Apı	pendix C5, continued.							
No.	Park Name, Property Name or Tideland Location	Primary Type/ Classification or comment	b Acres (if known)	Saltwater Shoreline in linear feet	WSP&RC Tideland Frontage Feet ^C	Marine State Park (# of)	Under- water Park Sites	Arti- ficial Reet Sites
45	Squaxin Island State Park	Recreation Area	31.40	2673.00	2673.00			
46	Stretch Point State Park	Recreation Area/Marine	4.20	610.00	610.00	yes (1)		
47	Twanoh State Park	Recreation Area/Marine	182.02	3167.00	3167.00	yes (1)		
			812.21	35,048.00	36,608.03			
	Undeveloped State Park Areas:	-						
48	Lilliwaup Tidelands	(undeveloped; tidelands)		4122.00	4122.00			
				4,122.00	4,122.00			
PIEF	RCE COUNTY							
	Designated/Developed State Parks a	and Marine State Parks:						
49	Cutts Island Marine State Park	Marine	5.50	2100.00		yes (1)	yes	yes
50	Eagle Island Marine State Park	Natural Area/Marine	10.00	2600.00	2600.00	yes (1)		
51	Joemma Beach State Park	Recreation Area/Marine	122.00	3000.00		yes (1)		
52	Kopachuck State Park	Recreation Area/Marine	109.00	5600.00	5600.00	yes (1)	yes	yes
53	Penrose Point State Park	Recreation Area/Marine	152.10	11751.00	11751.00	yes (1)		
			398.60	25,051.00	19,951.00			
	Undeveloped State Park Areas:							
54	Haley Property	(undeveloped; tidelands)	177.90	2900.00	1980.00			
			177.90	2,900.00	1,980.00			
SAN	JUAN COUNTY							
	Designated/Developed State Parks a	and Marine State Parks:						
55	Blind Island Marine State Park	Natural Area/Marine	3.00	1280.00	1280.00	yes (1)		
56	Clark Island Marine State Park	Natural Area/Marine	55.05	11292.00	11292.00	yes (1)		
57	Doe Island Marine State Park	Natural Area/Marine	6.11	2049.00	2049.00	yes (1)		
58	James Island Marine State Park	Natural Area/Marine	113.65	12335.00	12335.40	yes (1)		
59	Jones Island Marine State Park	Marine	188.09	25000.00	25000.00	yes (1)		
60	Lime Kiln State Park	Recreation Area	39.00	2550.00	2550.00			
61	Matia Island Marine State Park	Natural Area/Marine	145.00	20676.00	680.00	yes (1)		
62	Moran State Park		5175.51	1800.00	1800.00			
63	Patos Island Marine State Park	Natural Area/Marine	207.40	20000.00	20000.00	yes (1)		
64	Posey Island Marine State Park	Recreation Area/Marine	1.00	1000.00	1000.00	yes (1)		
65	Spencer Spit State Park	Recreation Area/Marine	129.60	7840.00	7840.00	yes (1)		
66	Stuart Island Marine State Park	Recreation Area/Marine	86.00	4130.00	4130.00	yes (1)		
67	Sucia Island Marine State Park Also administers these satellites: (not elsewhere on this list):	Marine	564.08	77700.00	77700.00	yes (1)	yes	yes
	Cemetery Island Gossip Island							
68	Turn Island Marine State Park	Recreation Area/Marine	35.15	16000.00	16000.00	yes (1)		
			6,748.60	203,652.00	183,656.40			
	Undeveloped State Park Areas:							
69	Skull Island	(undeveloped; tidelands)	1.00	750.00	750.00			

No.	Park Name, Property Name or Tideland Location	Primary Type/ a Classification or comment	b Acres (if known)	Saltwater Shoreline b in linear feet	WSP&RC Tideland Frontage Feet ^C	Marine State Park (# of)	Under- water Park Sites	Arti- ficial Reef Sites
70	Mud Bay Tidelands	(undeveloped; tidelands)		11360.00	11360.00			
71	Northwest McConnel Rock	(undeveloped)	2.50	2000.00	2000.00			
72	Olga	(undeveloped; tidelands)	0.20	60.00	60.00			
73	Parks Bay Island	(undeveloped; tidelands)	2.50	2000.00	2000.00			
74	Lopez Island Tidelands	(undeveloped; tidelands)		4332.00	4332.00			
75	Dot Rock	(undeveloped; tidelands)	0.50	500.00	100.00			
76	Freeman Island	(undeveloped; tidelands)	1.00	720.00	720.00			
77	Iceberg Island	(undeveloped; tidelands)	3.40	1380.00	1380.00			
78	Castle Island	(undeveloped; tidelands)	2.00	1100.00	1100.00			
79	Unnamed Island #112	(undeveloped; tidelands)	0.50	500.00	500.00			
80	Unnamed Island #119	(undeveloped; tidelands)	0.30	300.00	300.00			
81	Unnamed Island #3	(undeveloped; tidelands)	3.00	800.00	800.00			
82	Unnamed Island #38	(undeveloped; tidelands)	1.00	1000.00	1000.00			
83	Unnamed Island #40	(undeveloped; tidelands)	1.00	800.00	800.00			
84	Unnamed Island #74	(undeveloped; tidelands)	0.50	500.00	500.00			
85	Unnamed Island #78	(undeveloped; tidelands)			500.00			
86	Unnamed Island #80	(undeveloped; tidelands)	0.50	500.00	500.00			
87	Unnamed Island #81	(undeveloped; tidelands)	0.50	500.00	500.00			
88	Victim Island	(undeveloped; tidelands)	5.00	1700.00	1700.00			
SK v	AGIT COUNTY		20.40	30,802.00	30,902.00			
JAF	Designated/Developed State Parks	and Marine State Parks						
89	Bay View State Park	Recreation Area	25.17	1285.00	1285.00			
90	Larrabee State Park		2683.50	8100.00	8100.00			
91	Saddlebag Island Marine S. P.	Recreation Area/Marine	23.70	6750.00	6250.00	yes (1)		
			2,732.37	16,135.00	15,635.00			

92	Burrows Island	(undeveloped; tidelands)	329.50	8670.00	8670.00									
93	Cone Islands	(undeveloped; tidelands)	9.85	2500.00	2500.00									
94	Huckleberry Island	(undeveloped; tidelands)	10.00		2900.00									
			349.35	11,170.00	14,070.00									
SNC	SNOHOMISH COUNTY													
	Designated/Developed State Parks an	d Marine State Parks:												
95	Mukilteo State Park	Launch Area	17.56	1495.00	1495.00									
			17.56	1,495.00	1,495.00									
THU	IRSTON COUNTY													
	Designated/Developed State Parks and Marine State Parks:													
96	Tolmie State Park	Recreation Area/Marine	106.15	1800.00	1800.00	yes (1)	yes	yes						
			106.15	1,800.00	1,800.00									

Арј	pendix C5, continued.							
No.	Park Name, Property Name or Tideland Location	Primary Type/ Classification ^a or comment	Acres (if known)	Saltwater Shoreline in linear feet	WSP&RC Tideland Frontage Feet	Marine State Park (# of)	Under- water Park Sites	Arti- ficial Reef Sites
WHA	ATCOM COUNTY			1			l I	
	Designated/Developed State Parks an	nd Marine State Parks:						
97	Birch Bay State Park	Recreation Area	193.21	8255.00	8255.00			
			193.21	8,255.00	8,255.00			
EST	IMATED TOTALS							
Park:	lo. of <u>Developed/Designated</u> 5: <u>60</u> ludes some satellite sites)	Est. Acres, Shore & Tideland length (for Designated Parks, where known)	<u>20,432.10</u>	490,761.70 92.9 miles	395,857.71 75.0 miles	<u>41</u>	<u>9</u>	<u>9</u>
Est. N	No. of <u>Undeveloped Areas</u> : <u>37</u>	Est. Acres, Shore & Tideland length (for Undeveloped areas, where known)	<u>1,634.80</u>	93,871.00 17.8 miles	96,399.00 18.3 miles			
TOTA	<u>L</u> Est. No. of State Park Areas: <u>97</u>	Est. Acres, Shore & Tideland length (for All Areas, where known)	<u>22,066.90</u>	584,632.70 110.7 miles	492,256.71 93.2 miles	<u>41</u>	<u>9</u>	<u>9</u>

a. This column provides information about the WSP&RC park area or property. There are two primary WSP&RC land classifications and four other types of park areas or park features represented in this column, defined as follows:

<u>Recreational Area</u>: Suited and/or developed for high-intensity outdoor recreational use, conference, cultural and/or educational centers, or other uses serving large numbers.

<u>Natural Area</u>: Designated for preservation, restoration, and interpretation of natural processes and/or features of significant ecological, geological or paleontological value while providing for low-intensity outdoor recreation activities as subordinate uses. <u>Marine</u>. Denotes a state park that provides facilities for boaters such as moorage space, boat launches and sewage pump-out stations. Many marine parks are accessible only by boat, while others may be reached by land as well.

<u>Undeveloped</u>. Refers to a State Park area with no public facilities. These areas have usually not been classified (land use classifications) and are generally being held for future WSP&RC development. These areas are excluded from the list and map of MPAs identified in this study.

Launch Area. Denotes a state park area with a public boat launch.

<u>Tidelands</u> Denotes a tideland area that is owned by WSP&RC, has been withdrawn by DNR for WSP&RC, is from a federal patent, is leased by WSP&RC, or is under other ownership. See note (c) below.

In addition to the land classification types listed here (Recreation Areas and Natural Areas), there are four other classifications used by WSP&RC: Resource Recreation Areas; Heritage Areas; Natural Forest Areas; and Natural Area Preserves.

b. Primary and secondary sources for total acreage and saltwater shoreline length:

Primary source: Washington State Parks and Recreation Commission. 1996. 1995-97 Biennium Area Reports: A brief description of areas administered by the Washington State Parks and Recreation Commission. January, 1996. 402 pp.

Secondary source: Mueller, M. and T. Mueller. 1993. Washington State Parks: A Complete Recreation Guide. The Mountaineers: Seattle, Washington.

Also note that blank entries for acreage or shoreline length indicate a gap in available information.

- c. As documented in WSP&RC records of tidelands: Tidelands under WSP&RC administration consist of areas that are owned by WSP&RC (approx. 25%), have been withdrawn by DNR for WSP&RC (approx. 47%), are from a federal patent (approx. 6%), are leased by WSP&RC (approx. 6%), or are under other ownership(approx. 16%). For some areas this column is blank, indicating a gap in available information.
- d. Larrabee State Park has saltwater shoreline and tidelands located in Skagit and Whatcom counties.

Appendix C6. Facilities Information for Washington Marine State Parks and Boat Moorage in Puget Sound and the San Juan Islands

Column Legend:

1 = Number of moorage buoys
 2 = Moorage float space footage
 6 = Sewage pump-out station
 7 = Porta-potty dump station

3 = Accessible by boat only 8 = Fee Park

4 = Underwater park for divers 9 = Campsites (primitive)

5 = Boat launch 10 = Moorage/boat launch floats removed during

winter

#	Park Name	1	2	3	4	5	6	7 8	8	9	10	#	Park Name	1	2	3	4	5	6	7	8 9	9	10
1	Blind Island	4		Х						х		17	Turn Island	3		Х)	(
2	Bowman Bay								х			18	Blake Island	23	1744	Χ	х		Х	Х	X >	<	
	(Deception Pass S.P.)							4	4										_	_		1	
	Sharps Cove	5	128	Х	Ц)	x :	Х		Χ	19	Cutts Island	9		Χ				_	4		
3	Clark Island	9		Х	Ш			1	_	х		20	Eagle Island	3		Х						1	
4	Cornet Bay		1140			Х	x 2	x :	Х			21	Fay Bainbridge	3				Х			>	<	
	(Deception Pass S.P.)				Ц			1		_										_	4	1	
5	Doe Island		60	Х				1		Х	Χ	22	Fort Flagler	7	244			Χ	_	Х	X >	<	Χ
6	Hope Island (north)	4		Х								23	Fort Ward	2			Х	Х			>	(
	(Deception Pass S.P.)							4	4										_	_		1	
7	James Island	5	134	Χ	Ц				X :	Х		24	Fort Worden	8	128		Χ	Χ		_	X >	<	Χ
8	Jones Island	7	264	Х	Ц			_	X :	Х	Χ	25	Hope Island (south)	1		Χ				_	4		
9	Matia Island	2	144	Х				X :	X :	Х	Χ	26	Illahee	5	356			Χ	_	Х	X >	<	
10	Patos Island	2		Х	Ш			1		Х		27	Jarrell Cove	14	682				Χ	Х	X >	<	
11	Posey Island			Х						х		28	Kitsap Memorial	2							>	<	
12	Saddlebag Island			Х						Х		29	Kopachuck	2			Х						
13	Skagit Island	2		Х								30	McMicken Island	5		Х							
	(Deception Pass S.P.)							1														_	
14	Spencer Spit	16			Ш			1		х		31	Mystery Bay	7	683				Х	Х	х		
15	Stuart Island			Х				Ŀ	Χ.	Х		32	Old Fort Townsend	4									
	Reid Harbor	15	621	Х	Χ	Х	X X	x :	X :	х		33	Penrose Point	8	304				Х	Х	х		
	Prevost Harbor	7	256		Ш				X	х		34	Pleasant Harbor		218				Х	Х	х		
16	Sucia Island			Х				Ŀ	X :	х		35	Potlatch	5									
	Echo Bay	14						_	X Z	х		36	Saltwater	2			Х				>	(
	Fox Cove	4						Ŀ	X :	Х		37	Sequim Bay	6	424			Х		Х)	<	Х
	Shallow Bay	8							X	х		38	Stretch Point	5							Х		
	Ewing Cove	4			Х				X	х		39	Tolmie	5			Х			Х			
	Snoring Bay	2			Ш]	x :	х		40	Twanoh	7	192			Х	Х		χ)	(
	Fossil Bay	16	778						x :	х		41	Joemma Beach	3	500			Х)	(Χ
													TOTALS:	265	9000								

Adapted from: Washington State Parks and Recreation Commission 1995. Your guide to Marine Parks and Boat Moorage.

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Marine Protected Areas in Puget Sound Volume 2: MPA Site Profiles and Appendices

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